

WE CLAIM:

1. A computer-implemented method for providing content to a target device, the method comprising:

identifying a type associated with the target device;

compiling an application based on a page file including information describing the content to be returned to the target device, the information including statements that provide choices for properties of the content to be returned, the choices being based on the type of target device;

evaluating the choices to override existing values for the properties corresponding to the choices; and

rendering the content based on the evaluated choices within the compiled application.

2. The computer-implemented method of claim 1, wherein the type is included within an instruction to transmit the content to the target device.

3. The computer-implemented method of claim 2, wherein the instruction comprises a request generated by the target device.

4. The computer-implemented method of claim 3, wherein the request comprises an HTTP request for the page file.

5. The computer-implemented method of claim 3, wherein the instruction further includes an identification of the page file.

6. The computer-implemented method of claim 1, wherein the information describing the content includes tags within the page file that identify at least one server object that is programmed to create the content.

7. The computer-implemented method of claim 1, wherein the statements that provide the choices include a declarative statement identifying at least one choice for at least one property of a server object corresponding to the declarative statement.

8. The computer-implemented method of claim 7, wherein the at least one choice applies if a pre-determined condition is satisfied.

9. The computer-implemented method of claim 1, wherein compiling the application further comprises generating code that describes a control hierarchy of server objects that are programmed to create the content.

10. The computer-implemented method of claim 9, wherein evaluating the choices comprises instantiating the control hierarchy based on the generated code.

11. The computer-implemented method of claim 9, wherein a server object includes a property and the control hierarchy further includes at least one choice for that property, the choice including a filter against which the type of target device is evaluated to determine whether to apply that choice to the property.

12. The computer-implemented method of claim 1, wherein evaluating the choices includes comparing the type of target device against a filter to determine whether to apply that choice to the property.

13. A computer-readable medium having computer executable instructions, comprising:

receiving an instruction to provide a page to a target device, wherein data is provided in the instruction identifying the target device;

determining whether a compiled version of the page exists for the target device;

if the compiled version of the page does not exist, compiling the page to create a class;

instantiating an instance of the class including a plurality of controls, at least one of the controls having a property and a choice of a value for that property based on the target device;

if a condition associated with the choice is satisfied, applying the value associated with the choice to the at least one control; and

rendering device-specific content to the target device.

14. The computer-readable medium of claim 13, wherein the instruction comprises a request generated by the target device.

15. The computer-readable medium of claim 14, wherein the instruction comprises an HTTP request for the page.

16. The computer-readable medium of claim 14, wherein the instruction further includes an identification of the page.

17. The computer-readable medium of claim 13, wherein the page includes tags that identify at least one server object that is programmed to create the content.

18. The computer-readable medium of claim 17, wherein the tags include a declarative statement identifying the choice for the property of the control.

19. The computer-readable medium of claim 18, wherein the at least one choice applies if a pre-determined condition is satisfied.

20. The computer-readable medium of claim 13, wherein compiling the application further comprises generating code that describes a control hierarchy of server objects that are programmed to create the content.

21. The computer-readable medium of claim 13, wherein the choice includes a filter against which the type of target device is evaluated to determine whether to apply that choice to the property.

22. A computer-readable medium encoded with a data structure, comprising:
a first data field identifying a server object that is programmed to create content for transmission to a target device, the server object having a property; and
a second data field associated with the first data field and including at least one choice of value for the property of the server object, the choice including a condition upon which the property should have the value, the condition being based on a characteristic of the target device.

23. The computer-readable medium of claim 22, wherein the data structure comprises a page file stored on an application server.

24. The computer-readable medium of claim 22, wherein the data structure comprises a control hierarchy stored in memory on an application server.

25. A modulated data signal encoded with a data structure, comprising:
a first data field identifying a server object that is programmed to create content for transmission to a target device, the server object having a property; and
a second data field associated with the first data field and including at least one choice of value for the property of the server object, the choice including a condition upon which the property should have the value, the condition being based on a characteristic of the target device